

ABSTRACT OF THE DISCLOSURE

Motor compressor-motor alternator unit with supplementary compressed air injection having a high-pressure compressed air reservoir and using a piston stroke control as well as an ambient heat energy recovery device. The pistons have two stages, one for motor work and the other for compressor work. The motor flywheel is equipped with a device for enabling an electric motor to operate the unit in compressor mode by using a domestic power network. The unit is further equipped with a fossil-fuel thermal heater combined with a thermochemical heater. The instant abstract is neither intended to define the invention disclosed in this specification nor intended to limit the scope of the invention in any way.